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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,864	08/06/2003	Donald R. Loveday	1999U026.US-CON3	2116
25959	7590	12/15/2005	EXAMINER	
UNIVATION TECHNOLOGIES LLC 5555 SAN FELIPE, SUITE 1950 HOUSTON, TX 77056			CHEUNG, WILLIAM K	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/635,864

Applicant(s)

LOVEDAY ET AL

Examiner

William K. Cheung

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1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Request for Continued Examination***

1. The request filed on November 18, 2005 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/635,864 is acceptable and a RCE has been established. An action on the RCE follows.
2. In view of amendment filed October 14, 2005, the rejection of Claims 1-13 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Martin et al. (US 5,306,775), is withdrawn.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10/772,823. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-13 of instant application and claims 1-15 of copending Application No. 10/772,823 are related a genus and its species.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's arguments filed October 14, 2005 have been fully considered but they are not persuasive. Applicants argue that 10/772,823 is directed to "unprocessed, untreated granular bimodal polyolefin" characterized in part by "wherein sieved neat polymer fractions obtained from 35, 60 and 120 mesh sieve sizes have I<sub>2</sub> values that are within 40% of one another". Applicants further argue that the present claims are directed to a "bimodal polyethylene copolymer" characterized by certain features of a finished product (such as pipes and films as in the dependent claims. Therefore, applicants believe that there is no suggestion in the current claims of the properties of various particle sizes of the polymer. However, applicants fail to recognize that although the particle sizes are not disclosed, the particle sizes can be inherently possessed by the claims of the present case before processed. Because the copending Application

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No. 10/772,823 is claiming an unprocessed bimodal polyolefin polymer which fully encompasses the claims of the present case, the ODP rejection set forth is proper.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Debras et al. (US 5,639,834).

*The invention of claims 1-13 relates to a **bimodal polyethylene** copolymer comprising **ethylene derived units** and **units derived from at least one of a C<sub>4</sub> to C<sub>12</sub> olefin**; wherein the **polyethylene has a density of from 0.940 to 0.970 g/cm<sup>3</sup>**; an **I<sub>21</sub>/I<sub>2</sub> of 80 or more**; a **residual Group 4 metal content of 2.0 ppm or less**; a **M<sub>w</sub>/M<sub>n</sub> of from 20 to 60**; and wherein the polyethylene comprises a high molecular weight component and a low molecular weight component, the high molecular weight component present from **40 to 60 weight percent based on the total polyethylene**, and wherein **the high molecular weight component has a weight average molecular weight Mw of greater than 100,000 a.m.u.***

Debras et al. (col. 1, line 5-11) disclose a process for producing polyethylene having a broad molecular weight distribution, and is related to the production of high density polyethylene copolymers having a broad or bimodal molecular weight distribution, with a desirable molecular weight distribution ranging from 10 to 30 (col. 1, line 46-47). Further, Debras et al. (col. 2, line 63-67) indicate that the ethylene copolymer comprises a C3-C10 alpha-olefin. Debras et al. (col. 3, line 55-65;

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col. 4, line 42-50) indicate that a Group 4 based catalyst has been used at a level of 1.5 to 20 weight percent. Regarding the claimed density of the bimodal polyethylene copolymer, Debras et al. (col. 6, line 18) disclose a density of 0.94 for the prepared bimodal polyethylene copolymer. Therefore, in view of the substantially identical monomer and comonomer composition, substantially identical catalyst composition (or process), and substantially identical polymer density, molecular weight distribution, and bimodal feature disclosed in Debras et al., the examiner has a reasonable basis to believe that the claimed residual Group 4 metal content, the melt flow rate properties, the molecular weight of the ethylene copolymer, the notch tensile properties, the pipe properties with carbon black, and the MD tear properties are inherently possessed in Debras et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

Regarding the specific catalyst features of claim 13, applicant must recognize that the claimed invention is related to a bimodal polyethylene copolymer, “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung, Ph. D.

Primary Examiner

December 9, 2005

**WILLIAM K. CHEUNG  
PRIMARY EXAMINER**